

Listing of Claims:

1. (Currently Amended) A method of assaying whether an agent affects the beating rate of a cardiac myocyte which comprises:
 - (a) contacting a cardiac myocyte *in vitro* with an amount of a composition comprising a nucleic acid which encodes ~~at least one of~~ a HCN channel and MiRP1, effective to cause a sustainable beating rate;
 - (b) measuring the beating rate after step (a);
 - (c) contacting the cardiac myocyte with an agent to be assayed for its effects on the beating rate;
 - (d) measuring the beating rate after step (c); and
 - (e) comparing the difference between step (b) and step (d), thereby determining whether the agent affects the beating rate.
2. (Previously presented) The method of claim 1, wherein the cardiac myocyte is mammalian.
3. (Canceled)
- 4-8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled)

Applicants: Michael R. Rosen, et al
U.S. Serial No. 09/898,417
Filed: July 3, 2001
Page 4

14. (Canceled)

15-31. (Canceled)

32. (Currently amended) The method of claim 1, wherein the composition ~~comprises a nucleic acid encoding a HCN channel and a nucleic acid encoding a MiRP1, and the composition~~ is introduced into the cell by an adenovirus infection, viral-mediated infection, liposome-mediated transfer, microinjection, electroporation, or by coculturing the cell with the composition.

33. (Previously Presented) The method of claim 32, wherein the HCN is HCN1.

34. (Previously Presented) The method of claim 32, wherein the HCN is HCN2.

35. (Previously Presented) The method of claim 32, wherein the HCN is HCN4.

36. (Currently Amended) The method of claim 9 1, wherein the HCN channel is HCN2.

37. (Currently Amended) The method of claim 9 1, wherein the HCN channel is HCN1.

38. (Currently Amended) The method of claim 9 1, wherein the HCN channel is HCN4.

39-42. (Canceled)